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### **DETAILED ACTION**

Receipt is acknowledged of amendment and remarks filed on 4/13/09.

#### ***Status of claims***

Claims 2-4, 6-8, 16-19 and 21 are cancelled. Claim 1 has been amended Claims 1, 5, 9-15 and 20 are pending and currently examined in the application.

Restriction between the species drawn to cationic film forming polymer is withdrawn.

Claim 5 is examined with respect to all the species.

#### ***Claim Rejections - 35 USC § 103***

Claims 1, 5, 9-11, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of U.S. Patents 6,685,953 ('953) and PGPUB 2003/0008855 A1 ('855).

The instant application is claiming hair styling composition comprising diamide and a film-forming polymer (cationic film former). Patent '953 teaches external preparations using the same claimed diamide. See the abstract, see col.s 2-6 for the diamide, see col.7, lines 41-56 and see col.8, lines 8-30, where the patent teaches using diamide in hair care art. This includes using the diamide in hair rinses, hair treatment and in hair styling. Patent does not teach film-forming polymer. However PGPUB '855 teaches styling compositions using film-former. Film-formers are used in hair styling art. See paragraphs 7-9 and paragraphs 28-29. See paragraph 34 for the cationic polymers and see the elected species under cationic polymer. PGPUB at paragraph 39 teaches that the compositions can have additives and this includes silicone derivatives (claim 15) and proteins at paragraph 45.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to prepare hair composition of '953 and add film-forming agent of '855 and

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proteins, silicone derivatives in hair styling compositions. One of ordinary skill in the art would be motivated to add film-forming agent taught by '855 into the compositions of '953 with the reasonable expectation of success that the hair can be styled and it is conventional to add film formers for styling and one of ordinary skill in the art would be motivated to add the silicones since silicones derivatives are added to condition the hair This is a prima facie case of obviousness.

Claims 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of U.S. Patents 6,685,953 ('953) and PGPUB 2003/0008855 ('855) as applied to claims 1-2, 5, 7-11 and 15 above, and further in view of translated DE 199 02 530 ('530).

Patents '953 and 'PGPUB '855do not teach ceramides in the hair compositions. However DE document teaches ceramides. See page 2 for acylated sphingosine. See also examples. Ceramides are lipids and they exhibit conditioning property.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the hair composition of '953 and cationic film former, silicone derivatives, protein taught by PGPUB '855 and add ceramides taught by DE '530 in analogous hair compositions. One of ordinary skill in the art would be motivated to add the ingredients taught by '855 and DE and prepare another analogous composition with the reasonable expectation of success that new hair compositions has the advantage of providing conditioning effect and silicones are known conditioning agents and adding Ceramide also provide conditioning property. This is a prima facie case of obviousness.

Applicants' did not address the two 103 rejections separately, instead they argue together.

### ***Response to Arguments***

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Applicant's arguments filed 11/14/08/08 have been fully considered but they are not persuasive.

Applicants' argue that the combined disclosures of the references fails to suggest the observed improved hair performance of resulting from the combination of film-forming polymer and diamide and point out to tables 1-3 of the specification and argue that that the tables demonstrated improved hair performance for diamide (F) with different film forming polymers and thus the claimed invention is unobvious over the cited references.

In response to the above argument, patent '953 teaches that the claimed diamides are used in cosmetics and the cosmetics can be formulated into various forms and these include hair styling agent. In order to be used in hair styling agent, film formers are conventionally used. Thus patent suggests to one skilled in the hair care art that the diamides can be use din hair styling compositions since diamides can be used as humectant and one skilled in the hair care art would add film formers taught by PGPUB into the compositions of patent '953, which has the diamide and use these compositions for styling hair.

In response to the data in tables 1-3 of the specification, **table 1** is specific to **film forming polymer** which is **Acrylamide/alkyl acrylate/methoxypolyethylene glycol methacrylate copolymer** and the weight percent of the **diamide is 2 and 3%** and the weight percent of the **film forming polymer is 6%**. Table 1 did not show any results when the diamide compound is 0.01 % and 10 % or 20 % or 30%. Note that the diamide compound weight percent can be **0.01% to 20 %**. The weight percent of film forming polymer claimed is **0.05 to 30%** One can not extrapolate the data using 2% and 3% of diamide F to lowest and highest weight percent used for diamide F and one can not extrapolate the weight percent of the film forming polymer

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being 6% to lowest , highest weight percent of the film forming polymer. Applicant's point out to Table 2 and argue that table 2 illustrates compositions having the same components, varying the concentration of diamide as compared with a composition in the absence of diamide and argue that the data showed a significantly reduced occurrence of split ends and broken hairs from the compositions containing both the film forming polymer and diamide as compared with the film forming polymer alone and such results are nowhere disclosed or suggested in the cited art of record.

In, **table 2** the film forming polymer is **Vinylpyrrolidone/N, N-dimethylaminoethyl methacrylate copolymer diethyl sulfate ( free form is claimed in claim 20)** and the weight percent of the diamide is 2% and 4% and the weight percent of the film forming polymer is 2.5%. Table 2 did not show any results when the diamide compound is 0.01 % and 10 % or 20 % or 30%. Note that the diamide compound weight percent can be 0.01% to 20 %. The weight percent of film forming polymer claimed is **0.05 to 30%**. One can not extrapolate the data using 2% and 4% of diamide F to lowest and highest weight percent used for diamide F and one can not extrapolate the weight percent of the film forming polymer being 2.5% to lowest , highest weight percent of the film forming polymer.

In **table 3** the **film forming polymer** is **Acrylamide/dimethyldiallylammonium chloride copolymer** and the weight percent of the **diamide is 2%** and the weight percent of the **film forming polymer is 1.5%**. Table 3 did not show any results when the diamide compound is 0.01 % and 10 % or 20 % or 30%. Note that the diamide compound weight percent can be **0.01% to 20 %**. The weight percent of film forming polymer claimed is **0.05 to 30%** One can not

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extrapolate the data using 2% of diamide F to lowest and highest weight percent used for 1.5 % to lowest , highest weight percent of the film forming polymer.

The showing in the specification is not commensurate with the scope of claims with respect to the cationic film forming polymer. Therefore 103 rejection is deemed proper.

***Allowable Subject Matter***

Claim 20 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JYOTHSNA A. VENKAT whose telephone number is 571-272-0607. The examiner can normally be reached on Monday-Friday, 10:30-7:30:1st Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MICHAEL WOODWARD can be reached on 571-272-8373. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/JYOTHSNA A VENKAT /  
Primary Examiner, Art Unit 1619